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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,935	02/03/2006	Akihiko Nishio	L9289.05198	8746
52989 7590 07/09/2009 Dickinson Wright PLLC James E. Ledbetter, Esq. International Square 1875 Eye Street, N.W., Suite 1200 Washington, DC 20006				
EXAMINER				
HSIEH, PING Y				
ART UNIT		PAPER NUMBER		
2618				
MAIL DATE		DELIVERY MODE		
07/09/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/562,935

**Applicant(s)**

NISHIO, AKIHIKO

**Examiner**

PING Y. HSIEH

**Art Unit**

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 27-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE-US)  
Paper No(s)/Mail Date 5/8/09 6/30/09
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/8/09 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al. (U.S. PG-PUB NO. 2002/0119781) in view of Parantainen et al. (U.S. PATENT NO. 7,092,373).

-Regarding claims 27 and 30, Li et al. disclose a base station comprising an allocation unit configured to allocate a resource to be used by a mobile station **(the base station selects one or more clusters for the subscriber as disclosed in paragraph 43)**; a modulating unit **(Orthogonal Frequency Division Multiplexing (OFDM) is an efficient modulation scheme for signal transmission over frequency-selective channels as disclosed in paragraph 2)** configured to modulate first allocation information indicating the resource **(cluster allocation as disclosed in paragraph 44)** and second allocation information indicating a destination of the user data **(the base station notifies the subscriber as disclosed in paragraph 44)**; and a transmitting unit configured to simultaneously transmit the modulated first allocation information and the modulated second allocation information **(the base station notifies the subscriber about the cluster allocation through a downlink common control channel or through a dedicated downlink traffic channel if the connection to the subscriber has already been established as disclosed in paragraph 44 and 81)**, wherein, the modulated first allocation information and the modulated second allocation information correspond to the same user data **(the base station notifies the subscriber about the cluster allocation through a downlink common control channel or through a dedicated**

**downlink traffic channel if the connection to the subscriber has already been established as disclosed in paragraph 44 and 81).** However, Li et al. fail to specifically disclose the resource is to be used for transmitting an ACK/NACK signal in response to user data transmitted by the base station.

Parantainen et al. disclose the base station transmits information on the uplink channel to be used for acknowledgements as disclosed in fig. 4.

Therefore, it would have been obvious to one of ordinary skills in the art at the time of invention to modify allocated resource of Li et al. to be used for transmitting an ACK/NACK signal. One is motivated as such in order to make sure the data is successfully transmitted.

-Regarding claims 28 and 31, the combination further discloses the resource comprises a subcarrier **(Li et al., as shown in fig. 1A and further disclosed in paragraph 37).**

-Regarding claims 29 and 32, although the combination does not specifically disclose an encoding unit configured to encode the first allocation information together with the second allocation information, it would have been obvious to one of ordinary skills in the art at the time of invention to do so in order to simultaneously transmit the two information together in a channel.

#### ***Response to Arguments***

5. Applicant's arguments with respect to claims 27-32 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PING Y. HSIEH whose telephone number is (571)270-3011. The examiner can normally be reached on Monday-Thursdays (alternate Fridays) 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lana N. Le can be reached on (571)272-7891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. Y. H./  
Examiner, Art Unit 2618

/Lana N. Le/  
Primary Examiner, Art Unit 2614

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